This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A thiomorpholino steroid compound of general formula I

HO
$$\begin{array}{c}
C^{9} \\
C^{8} \\
C^{14} \\
C^{15}
\end{array}$$

$$\begin{array}{c}
C^{7} \\
C^{6}
\end{array}$$

$$\begin{array}{c}
C^{7} \\
C^{7}
\end{array}$$

wherein in the moiety I' of compound I

each bond between between C⁵ and C⁶, between C⁶ and C⁷, between C⁷ and C⁸, between C⁸ and C⁹, between C⁸ and C¹⁴ and between C¹⁴ and C¹⁵, independently, is a single bond or a double bond, at least one of these bonds being a double bond, with the proviso that there is no double bond in the steroid skeleton exclusively between C⁵ and C⁶, and

wherein

R⁴ and R⁴ independently, are selected from the group, comprising hydrogen and methyl.

- 2. (Original) The steroid compound according to claim 1, wherein in the moiety with general formula I' one double bond is present between C⁸ and C¹⁴ or two double bonds are present between C⁸ and C⁹ and between C¹⁴ and C¹⁵ or two double bonds are present between C⁵ and C⁶ and between C⁷ and C⁸.
- 3. (Currently Amended) The steroid compound according to <u>claim 1</u> any one of claims 1 and 2, being selected from the group comprising:

(20S)-20-[(thiomorpholin-4-yl)methyl]-4,4-dimethyl- 5α -pregna-8,14-dien- 3β -ol:

IA

 $(20S)-20-[(thiomorpholin-4-yl)methyl]-4, 4-dimethyl-5\alpha-pregna-8(14)-en-3\beta-ol:$

(20S)-20-[(thiomorpholin-4-yl)methyl]- 5α -pregna-8,14-dien- 3β -ol:

IC

 $(20S)\text{-}20\text{-}[(thiomorpholin-4\text{-}yl)methyl]\text{-}4,4\text{-}dimethyl\text{-}pregna-5,7\text{-}dien-3}\beta\text{-}ol$

ID

(20S)-20-[(thiomorpholin-4-yl)methyl]- 5α -pregna-8(14)-en-3 β -ol:

IE.

- 4. (Currently Amended) A pharmaceutical composition comprising at least one thiomorpholino steroid compound of general formula I according to <u>claim 1</u> any one of claims 1 3 and at least one pharmaceutically acceptable excipient.
- 5. (Original) The pharmaceutical composition according to claim 4, wherein the steroid compound of general formula I is comprised in an effective amount.
- 6. (Currently Amended) A use of the thiomorpholino steroid compound of general formula I according to <u>claim 1</u> any one of claims 1 3 to the preparation of a pharmaceutical composition being useful to regulate reproduction, especially meiosis.
- 7. (Original) The use according to claim 6 for non-in vivo use.
- 8. (Currently Amended) A use of the thiomorpholino steroid compound of general formula I according to <u>claim 1</u> any one of claims 1 3 to the preparation of a contraceptive or of a profertility drug.
- 9. (Currently Amended) A method of regulating reproduction, especially meiosis, comprising administering to a subject in need of such a regulation an effective amount of at least one thiomorpholino steroid compound of general formula I according to

claim 1 any one of claims 1-3.

- 10. (Currently Amended) A method for improving the possibility of an oocyte's ability to develop into a mammal, comprising contacting an oocyte removed from the mammal with the thiomorpholino steroid compound according to claim 1 any one of claims 1.
 3.
- 11. (Origianl) A method for the preparation of (20S)-20-[(thiomorpholin-4-yl)methyl]-4,4-dimethyl-5α-pregna-8,14-dien-3β-ol, comprising
 - a) starting from (20S)-20-hydroxymethyl-pregna-4-en-3-one;
 - b) introducing two alkyl groups in C⁴ by alkylation;
 - c) reducing the keto group to a hydroxy group;
 - d) protecting the resulting hydroxy group with an acyl group;
 - e) introducing a Δ^7 double bond by bromination/dehydrobromination;
 - f) isomerizing the dien $\Delta^{5,7}$ to the dien $\Delta^{8,14}$ by heating in the presence of acid;
 - g) oxidizing the 17-hydroxy group to an aldehyde group;
 - h) reductively aminizing the aldehyde group with thiomorpholine and removing the acyl group by reduction reaction
- 12. (Original) The method according to claim 11, wherein the acyl group is a benzoate group.